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SPAR AEROSPACE PRODUCTS LTD.

*File*



Annual Report 1969





The instrument shown on the cover is an armillary used by the great 16th century astronomer Tycho Brahe to determine the equatorial co-ordinates of stars at his observatory on the Danish island of Hveen.

# SPAR AEROSPACE PRODUCTS LTD.

*Directors:* L. D. CLARKE  
C. H. BARRETT  
D. S. BEATTY  
R. B. DODWELL  
W. H. JACKSON  
DR. P. A. LAPP  
DR. G. N. PATTERSON  
D. A. B. STEEL

*Officers:* R. B. DODWELL, *Chairman of the Board*  
L. D. CLARKE, *President and Chief Executive Officer*  
D. P. ROBERTON, *Executive Vice-President*  
G. J. AUBREY, *Vice-President, Finance*  
J. E. LOCKYER, *Vice-President, Engineering*  
J. D. MACNAUGHTON, *Vice-President, Marketing*  
S. R. PALMER, *Vice-President, Operations*  
S. A. MCKITTRICK, *Treasurer*  
D. A. B. STEEL, *Secretary*

*Transfer Agents and Registrars:* Montreal Trust Company, Toronto

*Auditors:* Clarkson, Gordon & Co.







Precision assembly of STEM spacecraft  
transmission and booms



## President's Report

The purchase in 1969 of the operations of York Gears Limited produced a marked change in your Company's posture. While, like most changes, it was not accomplished without some difficulties, your company is now moving into more settled waters and will shortly begin to enjoy the tangible benefits accruing from its new resources.

### Financial

The 1969 financial results reflect the short-term problems arising from the acquisition of the operations of the former York Gears Division of Levy Industries Limited and the sharp curtailment of expenditures by the Nixon Administration in military aircraft and space programs. This curtailment began to take effect in mid-1969 and resulted in the cancellation or postponement of a number of programs on which Spar had anticipated that it would be engaged during the second half of 1969.

Total revenue for the year was \$7,147,838 (of which approximately \$2 million related to completing York obligations) compared to \$5,435,614 in 1968. During the last six months of 1969 the operation of two plants resulted in a loss of productive efficiency which, coupled with unrecoverable expenses arising from the low level of work in our Caledonia Rd. plant, produced a loss for the year of \$555,805 (\$0.51 per average share outstanding) before the inclusion of a provision of \$191,056 (\$0.18 per average share outstanding) for extraordinary expenses arising out of the company's relocation to the Caledonia Road facility. These figures compare with a profit of \$22,360 (restated) in 1968.

In accordance with prior years' practice, management wrote off as a charge against earnings in 1969 the amount of \$168,624 related to research and development. Total expenditure in this respect, including Government grants, amounted to approximately \$342,000 for the year, compared to approximately \$350,000 in 1968.

Note #2 to the financial statements refers to your company's lawsuit against Levy Industries Limited. Included in the assets purchased from York Gears Limited were accounts receivable in excess of \$2 million. At the year end these accounts had been reduced to slightly over \$1 million, and by the end of the first quarter of 1970 to approximately \$575,000. Your directors are confident that the balance will be recovered within the next twelve months either directly from the former York customers or out of our lawsuit against Levy Industries Limited.

Although equipped with first class facilities and enjoying substantial sales, York Gears had been unprofitable in the recent past and had shown a loss of \$1.4 million in 1968. After taking possession of the new facilities on July 3, 1969, we discovered that York was behind schedule on some unprofitable gear contracts which were to have been completed prior to acquisition. In addition, it was found that York's commitments to the Canadian Government for fixed price repair and overhaul work for the balance of 1969 had been priced below cost, due to the low level of work in the plant. This situation forced your management to expend a larger than anticipated portion of its energies in completing York's outstanding work commitments.

Having fulfilled the contractual obligations assumed from York we have now contracted for new work on more favourable terms. This resulted in your company achieving a break-even position for the first four months of 1970.

### New Facilities

Our objective during the past two years has been to establish a solid base for profitable long term operations through specialization in the field of aerospace technology. While operating in Malton, Spar had a strong engineering capability backed up by a modest level of instrument repair and overhaul work. The acquisition of the former York operations provided your company with the manufacturing facilities required to meet this objective and also brought with it a large expansion of repair and overhaul activities.

Concurrent with the acquisition of the York operations, Spar entered into a long term lease with a major Canadian life insurance company. Under the agreement the landlord financed the expansion of the Caledonia Rd. plant needed to house our space and instrument activities formerly carried out at Malton. Spar has now a modern, well-equipped plant of approximately 200,000 sq. ft., and management will be able to take advantage of the economies to be gained from housing all operations under one roof. However, due to delays in completing the new facilities arising from last year's construction strike, the move from Malton had to be deferred until June, 1970. Consequently, the full economies anticipated from the consolidation will not be achieved until the third quarter of 1970, and production dislocation attendant upon moving will be reflected in the results for the second quarter.

### Outlook

Notwithstanding the tight economic situation, Spar was successful in generating a \$3/4 million backlog of gear manufacturing orders by the end of 1969 and it is our objective to at least double this figure during the balance of 1970. In addition to follow-on orders from former customers of York Gears Limited we have been able to secure four significant contracts from one of the largest American helicopter manufacturers, the Bell Helicopter Company of Fort Worth, Texas.

For the immediate future, repair and overhaul work (augmented by new gear overhaul contracts) will continue to be your company's main source of revenue. Engineering activities are continuing at 1969 levels with potential for considerable growth when the present constraint on the North American defence and space programs is eased. Our Spar-Lite system for police and emergency vehicles has been exceptionally well received by initial customers and there appears to be a good market potential for it not only in North America but throughout the world. For 1970 our research and development programs are continuing at the levels established in 1968/69 with particular emphasis on STEM and related space activities.

In the current period of transition, of merging and consolidating two operations and at the same time developing new business in a soft market, your directors are reluctant to predict operating results for the year. We are, however, heartened by the substantial turn-around in your company's operations as evidenced by the results of the first four months of the current year.

Early in 1970 your management team was strengthened by the appointment of Mr. George J. Aubrey, C.A., as vice-president, finance.

In conclusion, we would like to thank our employees at every level of responsibility for their loyalty and devotion during a most demanding and important period in the company's development and growth.

On behalf of the board,



L. D. CLARKE,  
President.

June 29, 1970



## Statement of Consolidated Earnings and Retained Earnings (Deficit)

Year ended December 31, 1969  
(with comparative figures for 1968)

	1969	1968
Revenues .....	\$7,147,838	\$5,435,614
Cost of sales including all expenses except items shown below .....	6,137,463	4,232,698
Administrative and selling expenses .....	1,149,202	843,817
Research and development costs (note 3) .....	168,624	184,429
Management fees (note 13) .....	54,349	50,000
Depreciation and amortization (note 5) .....	125,830	27,167
Interest charges (note 8) .....	81,235	8,443
	<u>7,716,703</u>	<u>5,346,554</u>
Earnings (loss) before income taxes and extraordinary items .....	(568,865)	89,060
Income taxes provided (recovered) .....	<u>(13,060)</u>	<u>32,700</u>
Net earnings (loss) for the year before extraordinary items* .....	(555,805)	56,360
Extraordinary items:		
Provision for relocation costs (note 10) .....	151,810	
Write off of excess of cost of investment in subsidiary over net book value at date of acquisition—no longer of value .....	39,246	
Organization and other initial expenses (note 5) .....		34,000
	<u>191,056</u>	<u>34,000</u>
Net earnings (loss) for the year* .....	(746,861)	22,360
Retained earnings, beginning of year .....	<u>22,360</u>	
Retained earnings (deficit), end of year .....	<u>\$ (724,501)</u>	<u>\$ 22,360</u>
*Earnings (loss) per common share		
Before extraordinary items .....	<u>\$(.51)</u>	<u>\$.06</u>
After extraordinary items .....	<u>\$(.69)</u>	<u>\$.02</u>

Based on weighted average number of common shares outstanding (1969—1,080,167; 1968—917,220).

(Reference should also be made to note 9 for common shares reserved for possible future conversion and exercise of options).

(See accompanying notes to the financial statements)

# SPAR AEROSPACE PRODUCTS LTD.

(Incorporated under the laws of Canada)

## Consolidated Balance

(with comparative figures)

### ASSETS

	<u>1969</u>	<u>1968</u>
Current:		
Cash.....	\$ 6,698	\$ 62,889
Accounts receivable (note 2).....	3,677,935	1,162,001
Government incentive grant receivable.....	112,180	60,069
Inventories, less progress payments (note 4).....	1,631,262	1,022,691
Prepaid expenses (note 5).....	59,752	8,709
Total current assets.....	<u>5,487,827</u>	<u>2,316,359</u>
Non-current deferred interest charges on leased equipment (note 5).....	30,595	
Fixed, at cost:		
Machinery and equipment (note 5).....	2,130,808	207,369
Automotive.....	11,329	13,306
	<u>2,142,137</u>	<u>220,675</u>
Less accumulated depreciation.....	147,183	24,465
	<u>1,994,954</u>	<u>196,210</u>
Leasehold improvements at cost less amortization (note 10).....		<u>24,323</u>
Net fixed assets.....	1,994,954	220,533
Excess of cost of investment in subsidiary over net book value of assets at date of acquisition.....		39,246
	<u>\$7,513,376</u>	<u>\$2,576,138</u>

On behalf of the Board:



Director



Director

(See accompanying notes to the financial statements)





et, December 31, 1969

figures for 1968)

## LIABILITIES and SHAREHOLDERS' EQUITY

	<u>1969</u>	<u>1968</u>
Current:		
Bank indebtedness (note 6) . . . . .	\$2,194,367	\$ 295,000
Accounts payable and accrued charges . . . . .	1,602,120	351,211
Employee deductions payable . . . . .	107,400	63,114
Income and other taxes payable (note 7) . . . . .	70,867	71,959
Current portion of long term debt (note 8) . . . . .	<u>505,265</u>	
Total current liabilities . . . . .	4,480,019	781,284
Long term debt (note 8) . . . . .	640,562	
Deferred income taxes . . . . .		9,700
Shareholders' equity:		
Capital stock (note 9) . . . . .	3,117,296	1,762,794
Retained earnings (deficit) . . . . .	<u>(724,501)</u>	<u>22,360</u>
Total shareholders' equity . . . . .	<u>2,392,795</u>	<u>1,785,154</u>
	<u>\$7,513,376</u>	<u>\$2,576,138</u>

## Auditors' Report

To the shareholders of Spar Aerospace Products Ltd.:

We have examined the consolidated balance sheet of Spar Aerospace Products Ltd. and subsidiary companies as at December 31, 1969 and the statement of consolidated earnings and deficit and consolidated source and use of funds for the year ended on that date. Our examination included a general review of the accounting procedures and such tests of accounting records and other supporting evidence as we considered necessary in the circumstances.

In our opinion, these financial statements present

fairly the financial position of Spar Aerospace Products Ltd. and subsidiary companies as at December 31, 1969, and the results of their operations and the source and use of their funds for the year then ended, in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year after giving retroactive effect to the method of recording depreciation and restatement of extraordinary item referred to in note 5 to the financial statements.

Toronto, Canada,  
June 15, 1970.

*Clarkson, Gordon & Co.*  
Chartered Accountants



# Statement of Consolidated Source and Use of Funds

Year ended December 31, 1969  
(with comparative figures for 1968)

	<u>1969</u>	<u>1968</u>
<i>Source of funds:</i>		
Issue of capital stock . . . . .	\$1,354,502	\$1,762,794
Disposal of fixed assets . . . . .	25,474	1,677
	<u>1,379,976</u>	<u>1,764,471</u>
<i>Use of funds:</i>		
Loss (earnings) for year excluding depreciation and other non-cash outlays . . . . .	548,844	(59,227)
Acquisition of York Gears— Total receivables, inventories, machinery and equipment and other assets acquired (includes capitalized lease-option contracts) . . . . .	\$4,983,910	
Deduct current assets included therein and paid for by assumption of current liabilities . . . . .	<u>3,018,290</u>	
Machinery and equipment and other non-current assets acquired	1,965,620	
Deduct portion financed by assumption of long term debt including lease-option contracts . . . . .	<u>1,298,419</u>	
Balance of non-current assets paid for by assumption of current liabilities and thus an outlay of funds . . . . .	667,201	
Other additions to fixed assets . . . . .	33,341	233,578
Repayment of long term debt and provision for instalments due in 1970 . . . . .	657,857	
Working capital deficiency of subsidiary at date of acquisition . . . . .		55,045
	<u>1,907,243</u>	<u>229,396</u>
Increase (decrease) in working capital . . . . .	(527,267)	1,535,075
Working capital, beginning of year . . . . .	<u>1,535,075</u>	
Working capital, end of year . . . . .	<u>\$1,007,808</u>	<u>\$1,535,075</u>

(See accompanying notes to the financial statements)



# Notes to Consolidated Financial Statements December 31, 1969

## 1. General

The accompanying consolidated financial statements include the accounts of all subsidiaries (wholly-owned) of the Company. Effective July 3, 1969 the Company purchased certain of the assets of York Gears Limited (hereafter referred to as York Gears) for the assumption of certain liabilities of York Gears. The accompanying financial statements accordingly include the results of operations of the York Gears division for the six months ended December 31, 1969.

## 2. Accounts receivable

Included in accounts receivable are amounts aggregating \$1,067,000 in respect of which a suit has been initiated against Levy Industries Limited as a guarantor of such accounts acquired from York Gears. Since the year end, amounts have been reduced by collections of \$490,000. No allowance has been provided against the balance since it is the opinion of the Company's legal counsel that the suit will be successful.

## 3. Research and development costs and Government incentive grants

The Company follows the practice of expensing all research and development expenditures as incurred with the exception of costs related to the manufacture of equipment for development purposes. The latter expenditures are capitalized and included as machinery and equipment.

In respect of 1969 the Company has received, or is eligible to receive, grants and assistance aggregating \$174,000 under various Canadian Government assistance programs. These amounts have been applied to reduce research and development costs.

## 4. Inventories

Inventories are classified as follows:

	1969	1968
Work in process . . . . .	\$ 911,544	\$2,179,586
Less progress payments . . . . .	140,890	1,486,639
	<u>770,654</u>	<u>692,947</u>
Raw materials, parts and supplies . . . . .	780,206	270,811
Finished goods . . . . .	80,402	58,933
	<u>\$1,631,262</u>	<u>\$1,022,691</u>

Inventories of raw materials and finished goods are valued generally at the lower of cost, applied on a moving average basis, and market value determined on the basis of replacement cost or net realizable value, whichever is lower.

Work in process represents contracts valued at estimated sales value calculated on the percentage of completion basis where the work has advanced sufficiently to warrant such a valuation, and contracts in the initial stages of work which are valued at cost. Under the percentage of completion method, revenue is accrued as the work is performed, and provision is made for total anticipated losses where the estimate of total costs on a contract indicate a loss.

## 5. Fixed assets and accumulated depreciation

Included in machinery and other fixed assets at December 31, 1969 is an amount of \$770,000 representing the capitalized cost of lease-option contracts assumed by the Company under the York Gears acquisition. These leases cover machinery and equipment used in the York Gears division and are equivalent to instalment purchase contracts for the assets. Accordingly the remaining payments required under the contracts have been capitalized, in part as machinery and equipment costs to be depreciated over the estimated remaining useful lives of the assets, and in part, as deferred interest charges to be amortized over the terms of the lease-option contracts. Prepaid expenses include \$41,376 of such interest charges to be amortized in 1970.

Concurrent with the acquisition of the assets of York Gears the Company changed its method of recording depreciation from the reducing balance basis at tax department rates to the straight line basis at the following rates; 6 $\frac{2}{3}$ % for heavy machinery, 10% for other machinery and fixtures, and 33 $\frac{1}{3}$ % for automotive. This change has been reflected retroactively in the financial statements for 1968 increasing net earnings by \$9,000 over the amount previously reported for that year.

The Company has also restated the 1968 financial statements to include as an extraordinary item \$34,000 of organization and other costs previously charged to retained earnings.

## 6. Bank Indebtedness

The bank indebtedness is secured by a general assignment of the accounts receivable and inventories.

## 7. Income Taxes

As a result of the 1969 operating loss and the basis of acquisition of the York Gears assets, the Company has approximately \$1,400,000 of taxable losses available for carry forward to future years.

The agreement with York Gears provided for the purchase of inventory by the Company at values which, although significantly in excess of realizable amounts, were recognized for income tax purposes. Such excess inventory values (allocated by the Company to the cost of other assets acquired from York Gears) are available as income tax deductions to the Company and are included in the amount of \$1,400,000 of taxable losses.



**8. Long term debt**

	Total liability	Portion due in 1970 shown in current liabilities	Balance owing
Non interest bearing loan from the Department of Defence, Government of Canada, assumed on the acquisition of York Gears, representing the balance of funds received (50% of \$1,200,000) for the purchase of machinery and equipment repayable in annual instalments to 1972, at which time the Company acquires full title to the assets. . . . .	\$ 423,959	\$ 216,969	\$ 206,990
Amounts payable on various lease-option contracts to the expiry of the leases including option payments. . . . .	721,868	288,296	433,572
	<u>\$1,145,827</u>	<u>\$ 505,265</u>	<u>\$ 640,562</u>

The interest portion of the payments under the lease contracts amounted to \$32,694 in 1969 and this is included with other interest charges in the statement of earnings.

**9. Capital Stock**

(a) The following table details the capitalization of the Company:

	Authorized shares	Maximum consideration for which authorized shares may be issued	Issued and outstanding December 31, 1969	Amount paid in
			Number	
Common shares without nominal or par value. . . . .	2,000,000	\$4,000,000	1,243,554	\$3,112,796
First deferred shares without nominal or par value. .	200,000	200,000	150,000	1,500
Second deferred shares without nominal or par value	200,000	200,000	150,000	1,500
Third deferred shares without nominal or par value. .	200,000	200,000	150,000	1,500
	<u>2,600,000</u>	<u>\$4,600,000</u>	<u>1,693,554</u>	<u>\$3,117,296</u>

During 1969, the Company:

- Obtained a certificate dated June 13, 1969, increasing the maximum consideration for which authorized shares may be issued from \$2,000,000 to \$4,000,000.
- Issued 300,000 common shares for an aggregate cash consideration of \$1,302,000 after deducting underwriting commissions of \$48,000.
- Issued 26,334 common shares under the Company's stock option plan for \$52,502 (see note 9(c)).

*Deferred shares*

- (b) Dividends are not payable on the deferred shares until the year following that in which the consolidated net profit of the Company, after tax, exceeds, in the case of the first deferred—\$200,000, second deferred—\$300,000 and the third deferred—\$400,000. When payable, dividends on the first, second and third classes of deferred shares are also restricted to the dividends declared on the preceding class, and in the case of the first deferred, on the common shares paid in the preceding fiscal year of the Company. The first and second deferred shares carry one vote and the third deferred carry three votes per share.

The deferred shares are convertible into common shares under specific conditions on the basis of one deferred share plus a cash amount for one common share as follows:

	May be converted in the year following the year in which the consolidated net profit after tax exceeds	or in any event after	Converted on basis of 1 common share for 1 deferred share plus cash of
First deferred shares. . . . .	\$200,000	April 30, 1976	\$0.50
Second deferred shares. . . . .	300,000	April 30, 1976	1.00
Third deferred shares. . . . .	400,000	April 30, 1980	1.50

The second deferred shares are convertible in a year subsequent to the conversion of the first deferred and the third deferred in a year subsequent to the conversion of the second deferred.



*Stock option plan*

- (c) Under an incentive stock option plan the Board of Directors have granted options to full time officers and other employees covering 68,500 common shares of the Company (of which 33,500 shares related to options granted in 1969) exercisable to March 31, 1974. Options covering 33,300 common shares are outstanding at December 31, 1969 as follows:

<u>Year option granted</u>	<u>Exercisable to</u>	<u>Option price</u>	<u>Number of shares</u>
1968	March 31, 1973	\$1.875	2,000
1968	October 31, 1973	1.875	1,000
1968	March 31, 1973	1.875	1,800
1969	March 31, 1974	1.875	1,500
1969	March 31, 1973	3.00	5,000
1969	March 31, 1973	3.50	5,000
1969	March 31, 1973	4.00	5,000
1969	March 31, 1974	4.725	3,000
1969	March 31, 1974	5.225	3,000
1969	March 31, 1974	5.725	3,000
1969	March 31, 1974	5.975	3,000
			<u>33,300</u>

During 1969 options on 25,700 shares were exercised for a cash consideration of \$51,313; and in lieu of exercising options with respect to 1,000 common shares certain optionees elected under the terms of the plan to receive 634 common shares having an aggregate market value equivalent to the value of the stock option benefits on the said 1,000 shares. Capital stock has been increased by \$1,189 (\$1.875 for each of the 634 shares issued in this connection) and a corresponding amount charged to salary expense.

*Common shares reserved for future issue*

- (d) (i) 450,000 common shares are reserved for possible conversion of the first, second and third deferred shares into common shares of the Company and 33,300 covering the possible exercise of the stock options outstanding.
- (ii) 5,000 common shares were issued in March 1970 under the terms of an agreement dated February 1968 under which the Company acquired certain inventory and equipment valued at \$13,000.

**10. Relocation of facilities**

Following the acquisition of York Gears in 1969, the Company commenced the removal of its Malton operations to its new facilities at Caledonia Road. The consolidation of operations was completed in June 1970 and unamortized leasehold costs, relocation and other costs including provision for rental payments on the idle facilities at Malton to June 1971 (the estimated time required to sub-let or terminate the lease commitment) have been reflected as an extraordinary item in the statement of consolidated earnings for 1969.

**11. Lease commitments**

In conjunction with the acquisition of the operating assets of York Gears, the Company entered into a 20 year lease with an insurance company covering the Caledonia Road facilities of York Gears. The annual rental under this lease is approximately \$324,000 including the cost of additions and modernization of the Caledonia plant since acquisition by the Company.

**12. Pension plans**

The Company has funded pension plans covering substantially all of its employees. The contributions by employees together with those made by the Company are deposited with trustees according to the terms of the plans. Pensions at retirement are related to remuneration and years of service. The amounts charged to income (including amounts paid to government pension plans) were \$163,327 in 1969, which amount includes amortization of prior service costs.

The unfunded prior service pension costs at December 31, 1969 were approximately \$37,000 and these will be funded on a straight line basis over the next 21 years. All vested benefits are fully funded.

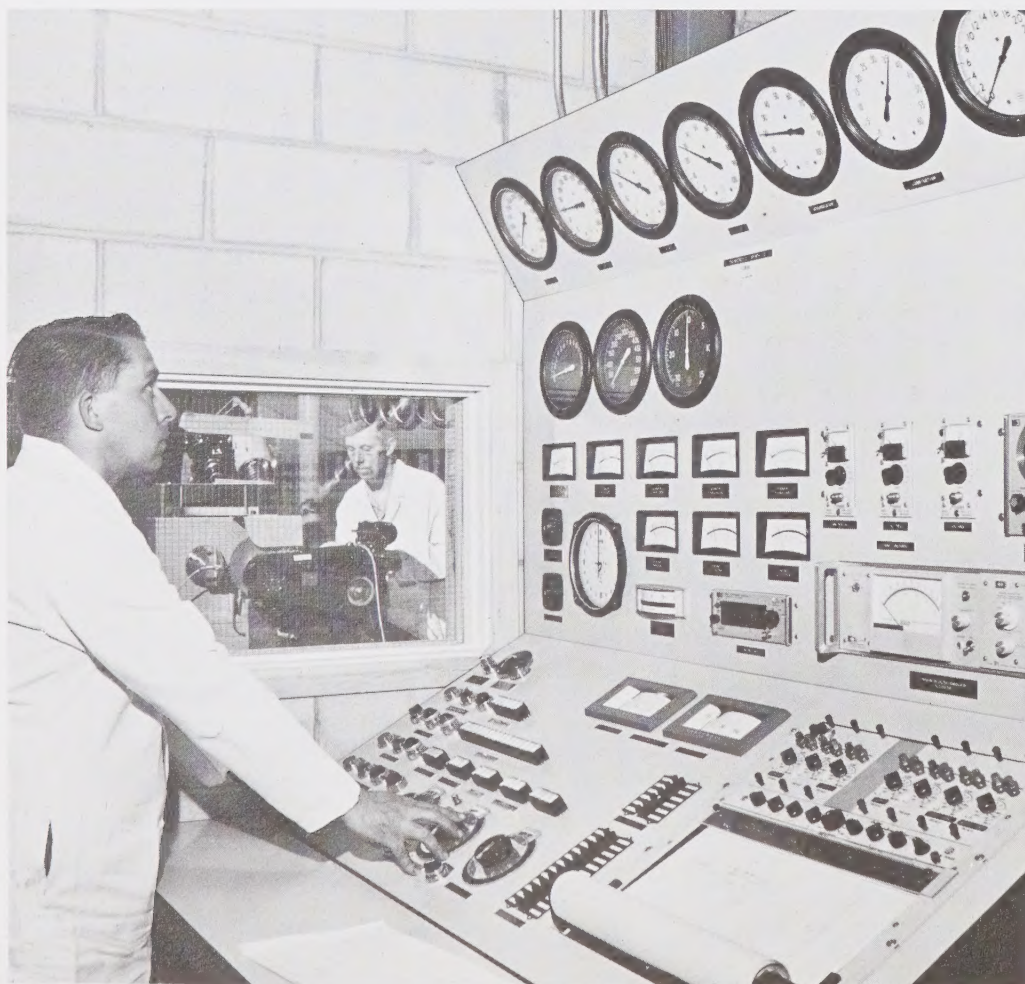
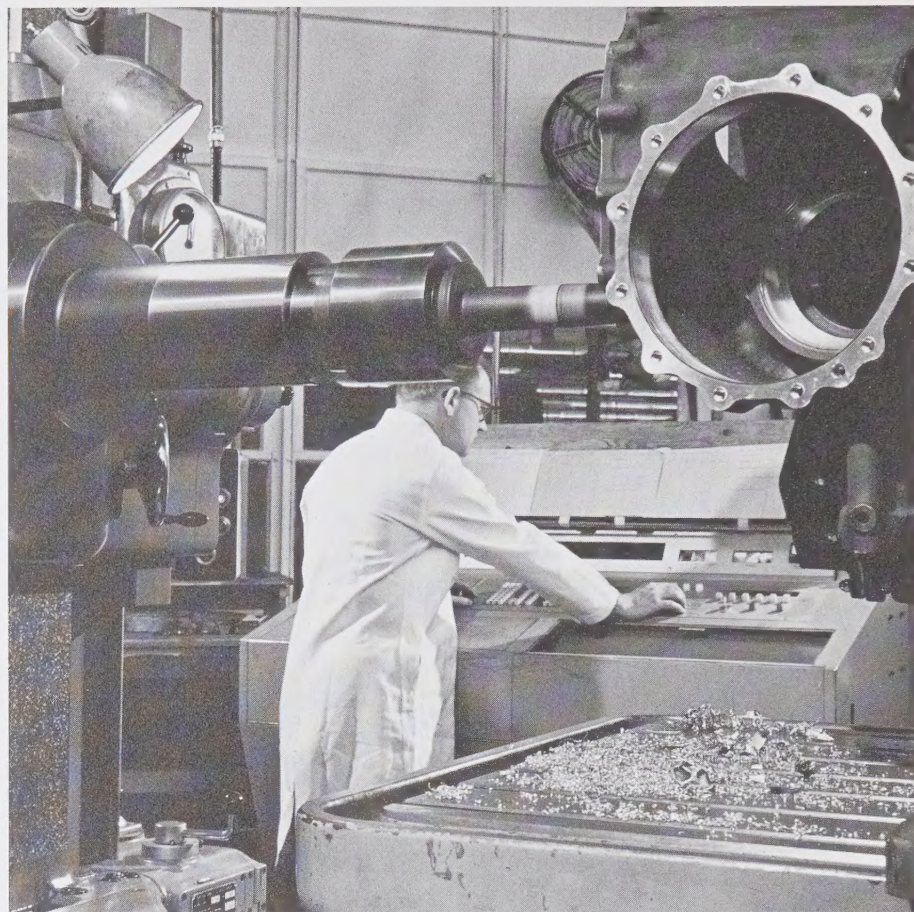
**13. Directors' and officers' remuneration**

The aggregate remuneration paid by the Company to directors and senior officers amounted to \$109,150 during the year 1969 (1968—\$100,572). In addition, \$54,349 was paid to Gainsborough Management Limited under the terms of a management agreement covering certain senior management services supplied by Gainsborough. The management fee payable for 1970 and subsequent years to 1974 in this connection is based on 1% of prior years gross sales (up to a maximum annual fee of \$75,000).





Machining a large helicopter transmission housing on a numerically controlled machine



SPAR's new (fourth) test rig complex, probably the most up-to-date installation of its kind in Canada, is capable of testing the constant speed drives as well as many hydraulic components of CF-5, DC8, DC9, 707, 720, 727, BAC111 and VC10 aircraft.





*Top left:*  
Development engineering  
testing



*Top right:*  
Spiral bevel gear  
on Bell OH58A

*Right:*  
Precision mechanical  
inspection





